



NATIONAL GUARD BUREAU
111 SOUTH GEORGE MASON DRIVE
ARLINGTON VA 22204-1382

02 July 2015

Mr. Marcel C. Acosta, Executive Director
National Capital Planning Commission
401 9th Street, NW Washington D.C.

Arlington Hall Station, Arlington, Virginia

Dear Mr. Acosta,

The National Guard Bureau headquarters presently located on Arlington Hall Station, Arlington Virginia is submitting an updated planning document for your approval. In order to provide enhanced security and emergency response coordination and support to the nation during disasters or conflict, the Army National Guard is operating a nation-wide high frequency (HF) radio system. This was mandated by and is supported by the highest levels of the government and the Department of Defense. This network of radio stations across America will help us to respond in the event of failure of the telecommunication infrastructure due to natural or hostile causes. Due to this newest facility construction project on the existing site, one existing High Frequency (HF) antenna has been relocated to new locations within AHS installation. This request has two venues, one for the approval of the HF Tower Antenna new location and approval for the replacement/relocation of the secondary HF antenna; onto building 2 roof-top (Newer Facility).

The frequencies used (the HF band is typically 2 MHz to 30 MHz) allow propagation by ionosphere reflection, rather than by direct wave. VHF frequencies used by police and cellular are too short range; such networks and satellites are vulnerable to sabotage, weather and possible jamming effects. This HF network can coordinate National Guard assistance and relief to people in disaster areas, aid in the land defense and will help to keep the fabric of American government together in national catastrophes, in war and peace.

However, in order to communicate effectively within this network, good quality antennas are maintained for supporting daily operations. For short to medium range, a smaller HF antenna is programmed to be installed on building 2 penthouse roof. This antenna is to reach distant stations (Hawaii, Guam, & Alaska. The primary antenna (*called a log periodic*) can make both transmitted and received signals from distant stations appear to be more than ten times stronger by focusing its response in one direction. Such a log periodic is required for our operations in the net; in past tests we have been unable to communicate reliably with the western U.S.A. Additional details on the network, HF radio and antennas may be found in Appendix 1.

To assist in your committee's evaluation, I have included in the Appendices a sketch of the general appearance of the two antenna types and the property with the proposed antenna locations, which is remote from any traditional sites (two miles west of Ft. Myer). The National

Guard has determined that, in accordance with Section 106 of the National Historic Preservation Act, there will be no adverse effect on any historical sites and that the proposed project qualifies as a categorical exclusion to environmental issues. The Tower is behind the east side of our facility, and has a small visual footprint. The secondary HF antenna system is planned to be located on building 2 Roof Top.

Your kind assistance and consideration in obtaining clearance for installing these two critical elements of this vital radio system is hereby requested.

Best Regards,

A handwritten signature in black ink, appearing to read "Michael Trexler", with a long horizontal flourish extending to the right.

Michael Trexler
Facility Manager
Arlington Hall Station